

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A recombinant DNA encoding a chimeric recombinant protein, comprising:

at least two first nucleotide fragments each independently encoding an epitope region of a member selected from the group consisting of the HIV-1 virus group M, ~~or HIV-1 virus group O, or of the~~ and HIV-2 virus, wherein at least one first nucleotide fragment encodes an epitope region of HIV-1 virus group M, and at least one first nucleotide fragment encodes an epitope region of HIV-1 virus group O,

at least a second nucleotide fragment encoding a linking region,

at least a third nucleotide fragment encoding an attaching region, ~~characterized in that~~ wherein each first nucleotide fragment independently encodes at least one immunodominant region of the gp120 glycoprotein of HIV-1, of the gp41 glycoprotein of HIV-1 group M, of the gp41 glycoprotein of HIV-1 group O or of the gp36 glycoprotein of HIV-2.

2. (Currently Amended) The recombinant DNA as claimed in claim 1, ~~characterized in that~~ wherein said first nucleotide fragment has as its sequence any one of the sequences ~~SEQ ID No.° SEQ ID NO:3, SEQ ID No.° SEQ ID NO:5, SEQ ID No.° SEQ ID NO:7, SEQ ID No.° SEQ ID NO:9, SEQ ID No.° SEQ ID NO:27, SEQ ID No.° SEQ ID NO:29 or SEQ ID No.° SEQ ID NO:31.~~

3. (Currently Amended) The recombinant DNA as claimed in claim 1, ~~characterized in that~~ wherein said second nucleotide fragment comprises at least one cleavage site.

4. (Currently Amended) The recombinant DNA as claimed in claim 1, characterized in that wherein said second nucleotide fragment has as its sequence at least any one of the following sequences, taken alone or in combination, ~~SEQ ID No.°~~ SEQ ID NO:11, ~~SEQ ID No.°~~ SEQ ID NO:13, ~~SEQ ID No.°~~ SEQ ID NO:15, ~~SEQ ID No.°~~ SEQ ID NO:17, ~~SEQ ID No.°~~ SEQ ID NO:19, ~~ou-SEQ ID No.°~~ SEQ ID NO:20, ~~SEQ ID No.°~~ SEQ ID NO:33, ~~SEQ ID No.°~~ SEQ ID NO:35, ~~SEQ ID No.°~~ SEQ ID NO:37, ~~SEQ ID No.°~~ SEQ ID NO:39, ~~SEQ ID No.°~~ SEQ ID NO:41, ~~SEQ ID No.°~~ SEQ ID NO:43, ~~SEQ ID No.°~~ SEQ ID NO:45, or ~~SEQ ID No.°~~ SEQ ID NO:47

5. (Currently Amended) The recombinant DNA as claimed in claim 1, characterized in that wherein said third nucleotide fragment encoding an attaching region is included in said second nucleotide fragment encoding a linking region.

6. (Currently Amended) The DNA as claimed in claim 1, ~~characterized in that~~ wherein said third nucleotide fragment has as its sequence any one of the sequences ~~SEQ ID No.°~~ SEQ ID NO:21, ~~SEQ ID No.°~~ SEQ ID NO: 23, ~~SEQ ID No.°~~ SEQ ID NO:25, ~~SEQ ID No.°~~ SEQ ID NO:33, ~~SEQ ID No.°~~ SEQ ID NO:35, ~~SEQ ID No.°~~ SEQ ID NO:37 or ~~SEQ ID No.°~~ SEQ ID NO:39.

7. (Currently Amended) A chimeric recombinant protein encoded by a recombinant DNA as claimed in claim 1, comprising
at least two epitope regions selected from members of the group consisting of
~~the HIV-1 virus group M₁ or HIV-1 virus group O₁ or the~~ and HIV-2 virus, wherein at least
one epitope region is from HIV-1 virus group M₁ and at least one epitope region is from
HIV-1 virus group O₁

at least one linking region, and

at least one attaching region.

8. (Currently Amended) The protein as claimed in claim 7, ~~characterized in that~~ wherein said linking region is a peptide comprising at least one glycine and/or at least one serine.

9. (Currently Amended) The protein as claimed in claim 8, ~~characterized in that~~ wherein said linking region has as its sequence any one of the sequences ~~SEQ ID No.° SEQ ID NO:12, SEQ ID No.° SEQ ID NO:14, SEQ ID No.° SEQ ID NO:16 or SEQ ID No.° SEQ ID NOs:18, 34, 36, 38, 40, 42, 44, 46 or 48.~~

10. (Currently Amended) The protein as claimed in claim 7, ~~characterized in that~~ wherein said attaching region is a region rich in histidines and derivatives thereof, ~~such as a region containing wherein~~ a density of histidines greater than or equal to 25%, ~~and preferably greater than or equal to 33%.~~

11. (Currently Amended) The protein as claimed in claim 7, ~~characterized in that~~ wherein said attaching region is a peptide comprising at least one lysine.

12. (Currently Amended) The protein as claimed in claim 7, ~~characterized in that~~ wherein said attaching region has as its sequence ~~SEQ ID No.° SEQ ID NO:22, 24 , 26, 34, 36, 38 or 40.~~

13. (Previously Presented) An expression vector comprising a recombinant DNA as claimed in claim 1.

14. (Canceled)

15. (New) The recombinant DNA as claimed in claim 1, further comprising at least one first nucleotide fragment encodes an epitope region of HIV-2 virus.

16. (New) A chimeric recombinant protein encoded by a recombinant DNA as claimed in claim 1, comprising

at least one epitope region from HIV-1 virus group M,

at least one epitope region from HIV-1 virus group O,

at least one epitope region from HIV-2 virus,
at least one linking region, and
at least one attaching region.

17. (New) The recombinant DNA of claim 1, comprising SEQ ID NO:51.